




HUNTERDON COUNTY VOCATIONAL SCHOOL DISTRICT

ENVIRONMENTAL SCIENCES



**THE RENEWABLE
ENERGY INDUSTRY
GENERATED
2.3 MILLION
JOBS GLOBALLY
LAST YEAR**

WWW.HCVSD.ORG

GENERAL INFORMATION

- All eighth grade students in Hunterdon County are eligible to apply. Out of county students will be considered based on availability of seats.
- Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade transcripts, and an interview.
- Students will be bused from their home or designated area to Voorhees High School (VHS) where the program is held. Students should coordinate transportation services through their home school.
- The Academy program is designed for students to attend VHS the entire day and for all four years of high school.
- Each ESEA class is equivalent to one 55 minute class within a rolling block schedule.
- There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school.
- After completing all the courses and academics necessary for graduation, students will graduate from the Environmental Sustainability and Engineering Academy.
- Students will be eligible to earn college credits from at least one or more NJ colleges. Colleges may require a discounted tuition fee.

FAQ

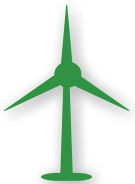
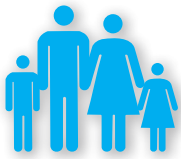
How does a HCUSD Academy differ from my high school's program?

- 4 years of sequential cohesive technical education curriculum
- Multiple college credits and certifications
- Career-focused student organizations
- Professional Advisory Board comprised of collegiate professors and industry professionals
- Structured learning experiences through internships and mentorships

FOR MORE INFORMATION

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EQUAL OPPORTUNITY | AFFIRMATIVE ACTION STATEMENT
It is the policy of the Hunterdon County Polytech School District not to discriminate on the basis of race, color, creed, religion, sex, ancestry, national origin, social or economic status, or disability in the education programs or activities and employment policies are required by Title IX of the Educational Amendments of 1972 and N.J.A.C. 6A-1.1 et. Seq. Inquiries regarding compliance may be directed to our affirmative Action Office at 908-788-1119 ext. 2003.



ENVIRONMENTAL SUSTAINABILITY
& ENGINEERING ACADEMY



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ENVIRONMENTAL SUSTAINABILITY & ENGINEERING ACADEMY

The Environmental Sustainability & Engineering Academy (ESEA) is the county's first four-year academy that focuses on renewable and sustainable energy in concert with environmental engineering. The program's curriculum will infuse and align with Centenary University curriculum and Project Lead the Way's nationally recognized Engineering curricula.

Hunterdon County Vocational School District's ESE Academy is operated on 40-acres of environmental and agriculture land located at Hunterdon County Educational Services Commission's (ESC) facility in Califon. The students take academic courses at Voorhees High School. The program provides students with exposure to engineering principles, resource management and policy development, sustainable resource management, and principles of renewable energy.



The HCVSD Academy model offers a unique and comprehensive approach to career and technical education. Students enroll in four years of a cohesive and sequential curriculum that provides multiple opportunities for students to earn college credits while in high school. Students participate in structured learning experiences such as internships and mentorships that are relevant to their intended college and career pathways. Additionally, students participate in career-focused extracurricular student organizations, exposing students to both local and national competitions, as well as scholarship opportunities.

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ESEA I

This introductory course explores sustainable environmental practices through the lens of natural resources and ecology, energy sources and production, agriculture and food systems, water quality and management, waste production and management, and other environmental topics. Students are challenged to consider social, economic, and environmental consequences while collaborating to produce sustainable environmental practices through scientific inquiry, engineering, site assessments, computer models, upgrading regulations, and meeting specialists in various green careers.

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ESEA II

The second year course explores environmental sustainability through an engineering lens using Project Lead the Way's Engineering curriculum. Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.

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ESEA III

Students will engage in the AP Environmental Science course as well as a college Principles of Environmental Science course. This course introduces students to the various components of our dynamic environment and promotes an understanding of the unique relationship between the environment and the many facets of society. Topics include an introduction to environmental economics and policy, environmental systems, biodiversity, the study of populations, food safety and agriculture, conservation, land use and management, environmental health, freshwater and marine resources, atmospheric science, renewable and non-renewable energy sources, waste management, and sustainability.

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ESEA IV

In the fourth year, students get the opportunity to work in a team to deliver a sustainable solution to a real-world environmental and/or engineering problem. Through the project, students apply effective practices in problem solving, documentation, data collection and analysis, and presentation, with guidance from a mentor or specialist in the field. Students have the opportunity to enroll in additional sustainability and sustainable practices courses through Centenary University.